

Remarks

This application has been carefully reviewed in light of the Office Action mailed June 14, 2006. Claims 1-34 are pending and stand rejected. Reconsideration and allowance of Claims 1-34 is respectfully requested in view of the following remarks.

Section 102 and 103 Rejections

The Office Action rejects Claims 1, 2, 11, 17, 18, 23, and 24 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,671,540 B1 to Hochman ("*Hochman*"). The Office Action also rejects Claims 3-5, 12-14, and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over *Hochman*. In addition, the Office Action rejects Claims 6-10, 15, 16, 19-22, and 28-34 under 35 U.S.C. § 103(a) as being unpatentable over *Hochman* as applied to claims 1, 11, 17, and 23 above, and further in view of U.S. Patent 6,304,771 B1 to Yohd et al. ("*Yohd*"). Applicants respectfully traverse these rejections for the reasons discussed below.

Claim 1 is allowable at least because the cited references fail to teach or suggest introducing a fluorescent contrast agent "having a fluorescence lifetime within a factor of about ten of the mean time-of-flight." The Office Action fails to identify any act within *Hochman* that it alleges meets this limitation. Moreover, *Hochman* makes no mention of any relationship between fluorescence lifetime and mean time-of-flight. Thus, *Hochman* clearly fails to disclose introducing a contrast agent "having a fluorescence lifetime within a factor of about ten of the mean time-of-flight."

In addition, Claim 1 is allowable at least because the cited references fail to teach or suggest "generating an image . . . in accordance with a mathematical expression modeling multiple light scattering behavior of the tissue." The Office Action asserts that "the images are enhanced by mathematical operation," but fails to identify any portion of *Hochman* that teaches generating an image in accordance with a mathematical expression modeling multiple light scattering behavior of the tissue. The only portion of *Hochman* cited by the Office Action merely discloses subtracting or ratioing empirically obtained datasets from each other, without any reference to a mathematical expression that models multiple light scattering behavior of the tissue (column 9, lines 7-14).

Claim 1 is also allowable at least because the cited references fail to disclose that the contrast agent is “selected in accordance with a predetermined relationship between degree of image contrast and at least one of fluorescence yield or the fluorescence lifetime.” The Office Action asserts that *Hochman* discloses this limitation in Col. 14, Ln. 31-53, but this is incorrect. *Hochman* merely discloses using a contrast agent “having a short half-life” that may be rapidly cleared from an area “so that additional doses of the contrast enhancing agent can be administered repeatedly” (column 14, lines 34-40). Thus, *Hochman* refers only to circulation time in the body and not to a photophysical property of the contrast agent related to the degree of image contrast. There is simply no teaching in the cited reference to provide that the agent is selected in accordance with a predetermined relationship between degree of image contrast and at least one of fluorescence yield or the fluorescence lifetime.

For at least the above reasons, Claim 1 is allowable, as are all claims depending therefrom. Favorable action is requested.

All other independent claims are allowable at least for analogous reasons, as are all claims depending therefrom. Favorable action is requested.

Conclusion

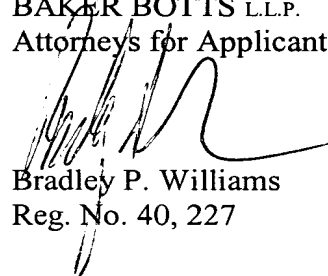
Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other apparent reasons, Applicants respectfully request allowance of all pending claims.

If the Examiner feels that prosecution of the present Application may be advanced in any way by a telephone conference, the Examiner is invited to contact the undersigned attorney at 214-953-6447.

Applicants do not believe that any fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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